

## REMARKS

The present Office Action addresses and rejects claims 1-33. Reconsideration is respectfully requested in view of the following remarks.

### *Rejections Pursuant to 35 U.S.C. §103*

Claims 1-5, 9-10, 21-23, and 28-30 are rejected pursuant to 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 5,573,007 of Bobo , Sr. (“Bobo”) in view of U.S. Patent No. 4,928,693 of Goodin et al. (“Goodin”). The Examiner argues that Bobo discloses the claimed invention, but admits that Bobo fails to teach the use of a fluid that is *incompressible*. Thus, the Examiner relies on Goodin to teach a pressure monitoring catheter having a fluid-filled, fluid-impermeable, sealed lumen filled with an incompressible fluid, arguing that it would have been obvious to replace the compressible fluid (i.e., the gas) of Bobo with the incompressible fluid of Goodin to “provide[] accurate pressure sensing.”

The Examiner has failed to establish a *prima facie* case of obviousness for at least two reasons: (1) there is no suggestion or motivation, in the references themselves or in the knowledge generally available to one or ordinary skill in the art, to modify Bobo to utilize an incompressible fluid, and (2) such a modification is expressly prohibited because Bobo teaches away from the use of an incompressible fluid.

One of the requirements for establishing a *prima facie* case of obviousness is that there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. “The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done.” M.P.E.P. 2142. The Examiner has failed to point to any motivation in Bobo or Goodin for modifying Bobo to use in incompressible fluid rather than a compressible fluid. The Examiner merely states that it would have been obvious to make the modification to “provide accurate pressure sensing.” Bobo, however, already provides accurate pressure sensing, and in fact Bobo explicitly explains why the use of a gas provides more accurate pressure sensing than the prior art fluid filled pressure sensing catheters. As will be discussed in more detail below, Bobo actually teaches away from the use of an incompressible fluid. Goodin

likewise does not provide any advantages for using an incompressible fluid. In fact, Goodin does not even discuss in detail how the incompressible fluid is used to measure pressure. Goodin merely states that the pressure is transmitted through the fluid to a blood pressure monitoring component. Goodin does not disclose the use of any type of flexible membrane for receiving pressure, and thus it is unclearly exactly how the incompressible fluid of Goodin functions. The Examiner has thus failed to point to any motivation to make the proposed modification, and thus fails to establish a *prima facie* case of obviousness.

The Federal Circuit has also made it clear that the mere fact that the references can be combined or modified is not sufficient to establish *prima facie* obviousness. *In re Millis*, 916 F.2d 680 (Fed. Cir. 1990); *see also* M.P.E.P. 2143.01. The mere fact that the claimed invention is within the capabilities of one of ordinary skill in the art is also not sufficient by itself to establish *prima facie* obviousness. *Ex parte Levingood*, 28 USPQ2d 1300 (Bd. Pat. Appl. & Inter. 1993). While Bobo may be capable of using an incompressible fluid instead of a compressible fluid, and while a person of ordinary skill in the art may be capable of making such a modification, this alone is not sufficient to establish that such a modification would have been obvious. Again, there must be some suggestion or motivation in the references for doing so, and there is not.

Not only has the Examiner failed to point to any motivation in the prior art to modify Bobo in view of Goodin, but the Examiner has overlooked the fact that Bobo teaches away from the combination. The Federal Circuit has made it clear that references cannot be combined where references teach away from the combination. *See, e.g., In re Grasselli*, 713 F.2d 731, 743 9Fed. Cir. 1983) (holding that it is improper to combine references where the references teach away from their combination); *see also* M.P.E.P. 2145(X)(D). Bobo specifically discloses the disadvantages of using a liquid (i.e., an incompressible fluid), rather than a gas (i.e., a compressible fluid). In particular, in the Background of the Invention section Bobo explains that liquid filled pressure monitoring catheters suffer from the following disadvantages: the liquid must remain sterile so as to avoid the introduction of pathogenic organisms into the body (Col. 1, lines 40-45); the catheters are difficult to manufacture as air bubbles must be removed from the catheter (Col. 1, line 64 to Col. 2, line 2); inadvertent air bubbles may be introduced during use, and flushing or manipulation of the catheter will result in inaccurate pressure readings (Col. 2, lines 2-9); the pressure transducer must remain on

a level plane with the pressure-receiving aperture(s) to avoid inducement of hydrostatic error in the monitored pressure (Col. 2, lines 10-15); and any movement or adjustment of the positioning of the patient during use will result in hydrostatic error in the pressure reading obtained (Col. 2, lines 15-19.). In order to overcome all of these various drawbacks of using liquid filled pressure monitoring catheters, Bobo provides a catheter that utilizes gas as a pressure-transmitting medium. Accordingly, Bobo specifically teaches away from the use of an incompressible fluid, and therefore Bobo cannot be modified as suggested by the Examiner to replace the compressible fluid (i.e., gas) with an incompressible fluid as taught by Goodin.

The Examiner also argues that “Bobo, Sr. does not teach away from a liquid, but lists some limitations that must be overcome if a liquid is utilized as the pressure transmitting medium.” This is incorrect. The statements set forth above and in the Background of the Invention section of Bobo clearly teach away from using any type of incompressible fluid. Bobo does not provide any limitations for overcoming these disadvantages – instead, Bobo replaces the incompressible fluid with a gas.

In sum, the Examiner has failed to establish a *prima facie* case of obviousness, and therefore claims 1-5, 9-10, 21-23, and 28-30 distinguish over Bobo and Goodin and represent allowable subject matter.

The Examiner also rejects various dependent claims as being obvious over Bobo and Goodin and further in view of additional prior art cited by the Examiner. As explained above, independent claims 1, 22, and 29 distinguish over Bobo and Goodin. The additional prior art provided by the Examiner does not remedy the deficiencies of Bobo and Goodin, as no person having ordinary skill in the art would modify Bobo to use an incompressible fluid. Accordingly, all of the dependent claims distinguish over Bobo, Goodin, and any other prior art cited by the Examiner at least because they depend from an allowable base claim.

### ***Conclusion***

In view of the amendments and remarks above, Applicant submits that all pending claims are in condition for allowance and allowance thereof is respectfully requested. Applicant encourages the Examiner to telephone the undersigned in the event that such communication might expedite

prosecution of this matter.

Respectfully submitted,

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